

**ABSTRACT OF THE DISCLOSURE**

Methods and systems are disclosed in which information is securely transmitted in a network comprising untrusted network devices. Setup messages are sent to a networking device, and based on the setup messages, light directing devices are configured to direct light along a path from an origin endpoint to a terminal endpoint, thus providing a path through the network.

- 5 Through the path, a stream of light information is sent using a plurality of light pulses to carry out quantum-cryptographic key distribution.

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